From: OCSPPNews [OCSPPNews@epa.gov]

Sent: 10/6/2021 8:36:33 PM

To: Blair, Susanna [Blair.Susanna@epa.gov]; Carlisle, Sharon [Carlisle.Sharon@epa.gov]; Dennis, Allison

[Dennis.Allison@epa.gov]; Diaz, Catherine [Diaz.Catherine@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov];

Dunton, Cheryl [Dunton.Cheryl@epa.gov]; Estling, Noah [Estling.Noah@epa.gov]; Freedhoff, Michal

[Freedhoff.Michal@epa.gov]; Garcia, Beth [garcia.beth@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov];

Hanley, Mary [Hanley.Mary@epa.gov]; Hartman, Mark [Hartman.Mark@epa.gov]; Harwood, Laura

[Harwood.Laura@epa.gov]; Hauff, Amanda [Hauff.Amanda@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Hughes, Hayley [hughes.hayley@epa.gov]; Izeman, Alexander [Izeman.Alexander@epa.gov]; Kaiser, Sven-Erik [Kaiser.Sven-Erik@epa.gov]; Keigwin, Richard [Keigwin.Richard@epa.gov]; Kochis, Daniel [Kochis.daniel@epa.gov]; Kovner, Karissa [Kovner.Karissa@epa.gov]; Kramer, George [Kramer.George@epa.gov]; Labbe, Ken [Labbe.Ken@epa.gov]; Layne, Arnold [Layne.Arnold@epa.gov]; Li, Jake [Li.Jake@epa.gov]; Lourie, Noah [Lourie.Noah@epa.gov]; Messina,

Edward [Messina.Edward@epa.gov]; Nguyen, Khanh [Nguyen.Khanh@epa.gov]; OPP Branch Chiefs

[OPP_Branch_Chiefs@epa.gov]; OPP Deputy & Associate Directors [OPP_Deputy_&_Associate_Directors@epa.gov];

OPP Division Directors [OPP_Division_Directors@epa.gov]; OPP IO [OPP_IO@epa.gov]; OPPT Managers

[OPPT_Managers@epa.gov]; OPS CSID CB [OPS_CSID_CB@epa.gov]; Parsons, Doug [Parsons.Douglas@epa.gov]; Picone, Kaitlin [Picone.Kaitlin@epa.gov]; Pierce, Alison [Pierce.Alison@epa.gov]; Pinto, Ana [Pinto.Ana@epa.gov]; Richmond, Jonah [Richmond.Jonah@epa.gov]; Romanovsky, Anna [Romanovsky.Anna@epa.gov]; Scheifele, Hans [Scheifele.Hans@epa.gov]; Schmit, Ryan [schmit.ryan@epa.gov]; Smith, Carolyn [smith.carolyn@epa.gov]; Sullivan, Melissa [sullivan.melissa@epa.gov]; Tyler, Tom [Tyler.Tom@epa.gov]; Varnado, Miriam [Varnado.Miriam@epa.gov];

Vendinello, Lynn [Vendinello.Lynn@epa.gov]; Vernon, Jennifer [Vernon.Jennifer@epa.gov]; Weiner, Janet

[Weiner.Janet@epa.gov]; Woodruff, Monica [Woodruff.Monica@epa.gov]

Subject: OCSPP News for October 6, 2021

OCSPP Daily News Round-Up

Toxics

- Chemical Watch 10/05; Electronics industry seeks certainty on TSCA PIP 3:1 prohibition
- Chemical Watch 10/06; US EPA outlines TSCA goals in four-year draft strategic plan
- Inside TSCA 10/05; EPA Plans New Chemicals 'Process' Reforms But Staff Eye Stronger Options

PFAS

- Chemical Watch 10/04; WL Gore to release PFAS-free waterproof material for apparel
- Inside TSCA 10/05; EPA Eyes 'Repository' Of PFAS Toxicity Data For Broad Regulatory Use
- Inside TSCA 10/05; California eyes Prop. 65 reproductive toxicity listing for two PFAS
- The Hill 10/05; Newsom signs laws banning 'forever chemicals' in children's products, food packaging

Blog/OpEd/Other

- Beyond Pesticide 10/06; Monoculture Agriculture Leads to Poor Soil Health
- Legal Examiner 10/05; Facts About Paraquat, Gramoxone, and Parazone Parkinson's Disease Lawsuits
- Mondaq 10/06; EPA Approval Of Pesticide Paraguat Now Under Attack

Electronics industry seeks certainty on TSCA PIP 3:1 prohibition

Kelly Franklin, Chemical Watch

https://chemicalwatch.com/347282/electronics-industry-seeks-certainty-on-tsca-pip-31-prohibition

Three electronics industry groups have requested that the US EPA make clear by year's end when different sectors will have to comply with a TSCA prohibition on the use of the flame retardant PIP (3:1) in articles.

The comments highlight the practical challenges faced by companies who are uncertain if the EPA will further extend the compliance date for the prohibition on phenol, isopropylated phosphate (3:1) adopted earlier this year as part of an effort to minimise the exposure to certain persistent, bioaccumulative and toxic (PBT) substances.

The EPA offered two temporary extensions in response to an outcry from industry about the unexpected compliance challenges of the prohibition. And with the latest extension – to March 2022 – the EPA also said it would "soon" issue a notice of proposed rulemaking to determine if specific sectors need more time to comply.

Certainty on that longer term plan is needed well before the March 2022 interim compliance deadline arrives, the Consumer Technology Association (CTA), IPC and the Information Technology Industry Council (ITI) said during a 21 September interagency review meeting on the compliance extension proposal.

Shipments from overseas take anywhere from four to 12 weeks to arrive, and cannot be stopped once they are en route, the electronics groups told officials from the EPA and the Office of Management and Budget (OMB).

Without confirmation there will be additional compliance time beyond March, "shipments to [the] US would effectively need to cease at the beginning of December", they said.

The groups reiterated their request for a four-year compliance extension, and for the EPA to finalise its rule by the beginning of December.

"Last minute regulatory decisions with no long-term solution are proving costly to industry," they added.

Challenging timeline

An agency official indicated at a Chemical Watch event last month that the forthcoming proposal may be based, at least in part, on the comments submitted by CTA, IPC and ITI.

However, with that proposal still undergoing interagency review, it appears unlikely the agency will be able to issue a finalised rule within the timeline requested by the groups.

The EPA told Chemical Watch that it plans to issue a proposal in the coming weeks to "further extend the compliance dates related to articles containing PIP (3:1) to ensure supply chains for key consumer and commercial goods are not disrupted".

"Following a 60-day public comment period, EPA will review all comments received and work as expeditiously as possible to issue a final rule," the agency added.

US EPA outlines TSCA goals in four-year draft strategic plan

Terry Hyland, Chemical Watch

https://chemicalwatch.com/347285/us-epa-outlines-tsca-goals-in-four-year-draft-strategic-plan

The US EPA has said it wants to complete eight TSCA risk evaluations annually by the end of fiscal year 2026, a goal that could lead to staggered releases of chemical reviews and allow the agency to better keep up with its statutory obligations.

A former EPA official, however, questioned whether the agency could hit that number in the next five years, given all the other initiatives the chemicals office is juggling in the existing chemicals programme.

The 2016 amendments to TSCA require the agency to have at least 20 evaluations ongoing at once, and to begin a new evaluation for each one it completes.

The goal to begin finalising eight evaluations annually, which was included in the agency's draft strategic plan for fiscal years 2022–2026, could move the agency toward a rolling process for prioritising and evaluating substances, rather than tackling large swaths of chemicals at once.

"EPA settled on a goal of completing at least eight high priority substance TSCA risk evaluations annually by 30 September 2026 in order to stagger future risk evaluations and continue TSCA implementation in a way that is sustainable," the agency told Chemical Watch.

But getting the programme on such a track within five years could be a challenge.

Since it began conducting risk evaluations in late 2016, the agency has only finalised ten to date, and the agency acknowledges in the draft that it completed only one of those first ten within the statutory deadline. The EPA now plans to reissue and possibly reverse each of those assessments.

On top of this, the EPA must conduct a "part 2" assessment on asbestos, and it is still gathering data on the next batch of 20 chemicals that have completion deadlines between December 2021 and June 2022.

"It's just too much for the [EPA] staff to handle at this point," to meet that 2026 target, said David Fischer, counsel at Keller and Heckman, who served as deputy assistant administrator for the EPA's chemical office during the previous administration.

The prioritisation process can take nine to 12 months, Mr Fischer said, followed by three to three and a half years to complete a TSCA risk evaluation. From start to finish, it is potentially a four-and-a-half-year process, he said.

That means the EPA would have to start the prioritisation process for eight substances as early as spring 2022 to meet the draft plan's 2026 target, he said.

Review of new chemical reviews

The draft also laid out plans to complete 500 new chemical reviews each year, and added a goal to begin evaluating compliance with section 5 consent orders and significant new use rules (Snurs).

By the end of September 2026, the agency plans to "review 90% of risk mitigation requirements for TSCA new chemical substances", it said. There were no such reviews in the latest fiscal year, which ended on 30 September, the agency said.

The agency separately said it "will leverage reporting tools like chemical data reporting (CDR) and other available information to assess compliance" with protections put in place to protect human health and the environment.

To support the new chemical review process, the draft plan calls for "requiring development of additional data when information is insufficient to conduct a reasoned evaluation".

The agency also said it "will continue to ensure that the public has access to as much chemical safety information as allowed by law".

Environmental justice remains a focus for the agency, according to the strategic plan. The agency said it would work with community groups and "help custodial staff and house cleaning companies advocate for protections from occupational exposure-related conditions", such as asthma.

Comments on the draft plan must be received by 12 November.

EPA Plans New Chemicals 'Process' Reforms But Staff Eye Stronger Options

David LaRoss and Diana DiGangi, Inside TSCA

https://insideepa.com/tsca-news/epa-plans-new-chemicals-process-reforms-staff-eye-stronger-options

EPA is weighing reforms to the "work processes" at its TSCA new chemicals office following four staffers' allegations of widespread scientific integrity violations in that program, but the staffers say the agency's plans so far fall short of addressing their concerns and are weighing other "options" to force their preferred changes.

In an Oct. 4 statement to Inside TSCA, EPA confirmed that it has commissioned a contractor to conduct "a workplace climate assessment" at the Office of Chemical Safety and Pollution Prevention's (OCSPP) new chemicals division, "to help capture feedback from employees and management about any potential workplace barriers and opportunities for organizational improvement."

"OCSPP leadership will use the feedback collected through this effort to understand, evaluate, and, if necessary, make changes in OCSPP's work practices and culture in order to promote collaboration and enhance the science that OCSPP uses in our program decision making," it says, adding that the assessment will "expand to other parts of OCSPP over the coming months."

But in an Oct. 1 interview with Inside TSCA, two of the OCSPP staffers who have alleged misconduct at the office, as well as Kyla Bennett, a former agency scientist now representing them as an official with the whistleblower group Public Employees for Environmental Responsibility (PEER), said EPA's announcement of its "climate assessment" gives no indication that it is considering the wholesale changes they have sought.

"We're starting to get frustrated, and considering our options moving forward, because we're not seeing the changes we had hoped would happen," one of the staffers said. While they did not specify which "options" they could pursue, PEER has already sought congressional oversight of the allegations, and has not yet addressed the possibility of outright litigation against EPA, either under labor law or to enforce TSCA's requirements for new chemical reviews.

And Bennett said that even though the scientists' complaint includes a call to overhaul the "culture" at OCSPP, she doubts a contractor-based process can achieve that goal. "Culture is a really hard thing to change, and we're talking about decades of corruption," she said. "PEER really believes there need to be major changes at OCSPP, and those changes include getting rid of some people."

Rather, she and the staffers said they see more potential in an active investigation by EPA's Office of Inspector General (OIG) into the new-chemicals program. "I think the IG is doing a great job so far. They've been very thorough," Bennett said. She noted that staff with the watchdog office have sought to engage with expert chemists and toxicologists on the staffers' claims, and talked "extensively" to the whistleblowers.

"I am hopeful they will be able to issue a report that backs us up," she said, though she noted that there is no apparent timeframe for releasing a final report. "That's going to take some time. I can't imagine we're going to

have anything before the end of the year."

EPA has maintained that its response to the allegations is separate from OIG's investigation. In its statement to Inside TSCA, the agency said, "EPA is committed to protecting employee rights, including the important right of all employees to be free from retaliation for whistleblowing," and that as part of that policy "the Agency promptly transmitted [PEER's] complaints to EPA's Office of Inspector General."

"In transmitting the complaints to the OIG, [chemicals chief] Michal Freedhoff stated, 'I am committed to ensuring that these matters are reviewed and evaluated fully. OCSPP is committed to supporting any investigation or other activity that your offices may initiate associated with PEER's document.' The OIG has initiated an investigation into the matter. That investigation is ongoing, and EPA is committed to fully supporting that investigation."

Scientific Reforms

Bennett told Inside TSCA that EPA's promises of [...]

WL Gore to release PFAS-free waterproof material for apparel

Julia John, Chemical Watch

https://chemicalwatch.com/346695/wl-gore-to-release-pfas-free-waterproof-material-for-apparel

WL Gore & Associates has announced its upcoming launch of a fabric-waterproofing technology without perand polyfluoroalkyl substances (PFASs), which could greatly increase the availability of PFAS-free waterrepellent garments.

The Gore-Tex producer's expanded polyethylene (ePE) technology for an inner layer of water resistance, and the accompanying top layer known as durable water repellent (DWR) treatment, will both be non-fluorinated, it said. The announcement follows action by Polartec and other manufacturers to transition away from PFASs.

According to Gore, a chief waterproof materials maker, the ePE substitute will replace the current fluorine option, ePTFE, in Gore-Tex brand outdoor and lifestyle garments, lifestyle footwear and snow sports gloves. Adidas, Arc'teryx, Dakine, Patagonia, Reusch, Salomon, Ziener and other retailers will offer these items next autumn, before the solution expands to more articles and sellers.

The ePE membrane is light but strong and has "a low environmental footprint", Gore said, noting the development supports its 2023 target of avoiding certain per- and polyfluorinated chemicals of environmental concern (PFCecs) over consumer good lifecycles. This Greenpeace-backed objective, set in 2017, has seen "significant progress" in removing the substances from both foundational membranes and DWR finishes, the producer told Chemical Watch, with most Gore consumer fabrics already featuring DWR without PFCecs.

The main difficulty in shifting away from the compounds is achieving "the durable protection and comfort performance necessary in many end-uses as demanded by our customers and consumers", the company said, including extreme mountain climbing.

The manufacturer added that it "value[s] the unique properties of ePTFE and fluoropolymers" and intends to keep using them "across a wide range of demanding applications", such as in medicine and aerospace. Gore said it will simultaneously look to curb ePTFE's environmental effects.

Still, environmental entities say businesses must go further by completely getting rid of the persistent substance class.

NGO response

Mike Schade, director of Toxic-Free Future (TFF) initiative Mind the Store, called PFASs in outdoor wear "an overengineered solution", and Gore's effort "a step in the right direction". However, he said, "without a commitment to banning PFASs as a class in all of its products, Gore will continue to contribute to PFAS pollution", contaminating people worldwide.

Although more companies are pledging to adopt apparel without the compounds, Mr Schade told Chemical Watch some may overlook fluorinated membranes, whose lifecycle impacts "can be devastating to communities and workers".

Major businesses should quickly "eliminate all PFASs, including membranes and surface coatings", he said. R&D investment "can unleash massive business opportunities and value to meet the rising consumer demand for safe and healthy alternatives".

Chiara Campione, Greenpeace Italy's corporate and consumer unit head, highlighted the need for regulation while recognising Gore's "big step towards the transformation of the outdoor market".

"There will always be irresponsible outdoor brands, as well as other sectors, that will continue to use PFCs, so now's the time for all players to act responsibly and enforce a broad ban on the entire group of PFCs," she said.

In the US, Maine passed the first-ever comprehensive prohibition on the compounds in July, which will enter into force by 2030. Meanwhile, the EU is considering limiting the whole substance class.

EPA Eyes 'Repository' Of PFAS Toxicity Data For Broad Regulatory Use

Diana DiGangi, Inside TSCA

https://insideepa.com/tsca-news/epa-eyes-repository-pfas-toxicity-data-broad-regulatory-use

EPA has released a newly modified method of detecting per- and polyfluoroalkyl substances (PFAS) that it says allowed it to rule out contamination in several pesticides, just as agency scientists used an advisory board meeting to tout their work on a range of new methods that could aid efforts to identify specific sources of the chemicals.

The agency announced Sept. 29 the availability of an "oily matrix method," to identify a subset of PFAS in liquids -- and that it had already applied the new approach to verify that there were no PFAS in stored samples of an anti-mosquito pesticide that had been stored in fluorinated high-density polyethylene (HDPE) containers, as part of a broader investigation into whether those plastics transfer perfluorinated chemicals to other substances.

It also notes that the "oily matrix" test standard was modified from EPA's Method 537.1, which "is mainly used for drinking water and was previously used in analyzing PFAS in" the storage containers themselves.

"The new method is intended to help pesticide manufacturers, state regulators, and other interested stakeholders test oily matrix products for PFAS and join the effort in uncovering any possible contamination," EPA's release continues. "In a shared interest to remove PFAS from the environment, if companies find PFAS in their product, EPA is requesting that they engage in good product stewardship and notify the agency."

EPA said it used the oily matrix method to analyze three stored samples of Permanone 30-30 and PermaSease 30-30, two mosquito pesticides, and determined that the tested samples contained no PFAS at or above the method's detection limit.

That marks the latest step in the agency's response to findings that a shipment of the widely-used pesticide Anvil 10+10 had been contaminated with PFAS -- which EPA reportedly determined likely came from the HDPE containers it was stored in. Those findings, in turn, spurred renewed calls from environmentalists to limit use of the fluorinated plastics under the Toxic Substances Control Act and other laws.

However, according to the new announcement, officials have yet to find any other contamination from similar containers.

"To date, the only PFAS contamination in mosquito control pesticide products that the Agency has identified originated from fluorinated HDPE containers used to store and transport a different mosquito control pesticide product (Anvil 10-10)," the agency wrote.

The oily matrix method is just one of several new or improved PFAS detection standards EPA is developing as part of a push to make it easier to detect contamination from the chemicals -- an effort that officials highlighted at a meeting of the agency's Board of Scientific Counselors (BOSC) the same day as the pesticide announcement.

"A major goal is having some sort of screening tool where we can lump PFAS into a single measurement in a single class and say, here is all of the PFAS," Alice Gilliland, the director of EPA's Center for Environmental Measurement and Modeling (CEMM), said in a presentation to BOSC's executive committee Sept. 29.

"This is of interest to us in research, and also the program offices, either potentially as a screening tool as need for further analysis if you're over a certain level of fluorine, or potentially even regulatory in the future."

EPA Research

During the Sept. 29-30 BOSC meeting, EPA officials updated the panel -- which advises the agency on its research agenda -- on their development of PFAS detection methods, which they said has been particularly focused on meeting the diverse list of testing needs presented by the variety of media that PFAS can contaminate, such as water, other liquids like pesticides, animal tissue and indoor air.

For instance, Hannah Liberatore, a scientist at EPA's Office of Research and Development (ORD), said her team is working on methods to detect total organic fluorine levels -- a measure of all PFAS combined in any particular sample -- for [...]

California eyes Prop. 65 reproductive toxicity listing for two PFAS

NA. Inside TSCA

https://insideepa.com/tsca-takes/california-eyes-prop-65-reproductive-toxicity-listing-two-pfas

California scientists are floating a literature review to support listing two per- and polyfluoroalkyl substances (PFAS) -- perfluorononanoic acid (PFNA) and perfluorodecanoic acid (PFDA), and salts of both -- for male reproductive toxicity under the state's Proposition 65 warning label law, finding that both exhibit several indicators of reproductive harm.

"PFNA and its salts and PFDA and its salts have been used in various industries, including as processing aids in fluoropolymer manufacture. PFNA and PFDA are also used in some cosmetic products," reads an Oct. 1 notice by the state's Office of Environmental Health Hazard Assessment (OEHHA).

"PFASs, including PFNA and PFDA, are global environmental pollutants of air, water, soil and wildlife, and are very persistent in the environment. Recent data from Biomonitoring California . . . have shown that PFNA and PFDA are readily detected in virtually all Californians," the notice adds.

OEHHA's announcement includes its release of a hazard identification document supporting the possible listing, and also sets a Dec. 14 meeting of the state's Developmental and Reproductive Toxicant Identification Committee (DARTIC) for that body to consider whether to approve the Prop. 65 listing of PFNA and PFDA. The office will take public comment on the hazard document through Nov. 15.

DARTIC advises and assists OEHHA in compiling the list of chemicals known to the state to cause reproductive toxicity as required by Prop. 65, the notice says. DARTIC serves as the state's body of qualified experts for determining whether a chemical has been clearly shown to carry reproductive risks through scientifically valid testing according to generally accepted principles.

Under the state's Prop. 65 law, once a chemical is listed as either a reproductive toxicant or a carcinogen, companies that manufacture or sell products containing it are required to determine whether they must provide toxicity warnings for the products, based on exposure levels. If they fail to provide required warnings the state's attorney general or private attorneys can bring litigation to compel compliance and seek monetary penalties.

OEHHA's hazard identification document is a compilation of results from numerous animal and human studies on the potential health impacts from PFNA and PFDA exposure, and concludes that both PFAS exhibit "key characteristics (KCs) for male reproductive toxicants" -- with five KCs for PFNA and four for PFDA.

Representatives of the American Chemistry Council "will be reviewing this listing proposal with members before determining whether to comment," says a spokeswoman with the group.

Newsom signs laws banning 'forever chemicals' in children's products, food packaging

Sharon Udasin, The Hill

https://thehill.com/policy/equilibrium-sustainability/575485-newsom-signs-laws-banning-forever-chemicals-inchildrens

California Gov. Gavin Newsom (D) signed two laws on Tuesday banning the use of toxic "forever chemicals" in children's products and disposable food packaging, as well as a package of bills to overhaul the state's recycling operations, his office announced that evening.

"California's hallmark is solving problems through innovation, and we're harnessing that spirit to reduce the waste filling our landfills and generating harmful pollutants driving the climate crisis," Newsom said in a press statement.

The pollutants driving the first two laws are perfluoroalkyl and polyfluoroalkyl substances (PFAS), a group of toxic compounds linked to kidney, liver, immunological, developmental and reproductive issues. These socalled "forever chemicals" are most known for contaminating waterways via firefighting foam, but they are also key ingredients in an array of household products like nonstick pans, toys, makeup, fast-food containers and

waterproof apparel.

One of the laws, introduced by Assemblywoman Laura Friedman (D), prohibits the use of PFAS in children's products, such as car seats and cribs, beginning on July 1, 2023, according to the governor's office.

"As a mother, it's hard for me to think of a greater priority than the safety and well-being of my child," said Friedman, in a news release from the Environmental Working Group (EWG). "PFAS have been linked to serious health problems, including hormone disruption, kidney and liver damage, thyroid disease and immune system disruption.

"This new law ends the use of PFAS in products meant for our children," she added.

Bill Allayaud, EWG's director of California government affairs, praised Newsom "for giving parents confidence that the products they buy for their children are free from toxic PFAS."

"It's heartening that for this legislation, the chemical industry joined consumer advocates to create a reasonable solution, as public awareness increases of the health risks posed by PFAS exposure," he said in a statement.

Because PFAS coating on infant car seats and bedding wear off with time, the toxins can get into the dust that children might inhale, according to the EWG.

The second PFAS-related law, proposed by Assemblyman Philip Ting (D), bans intentionally added PFAS from food packaging and requires cookware manufacturers to disclose the presence of PFAS and other chemicals on products and labels online — beginning on January 1, 2023.

"PFAS chemicals have been a hidden threat to our health for far too long," Ting said in a second EWG news release. "I applaud the governor for signing my bill, which allows us to target, as well as limit, some of the harmful toxins coming into contact with our food."

Despite the widely recognized risks of PFAS exposure, the Environmental Protection Agency has only established "health advisory levels" for the two most well-known compounds rather than regulate the more than 5,000 types of PFAS. States like California have therefore taken to enacting bits and pieces of legislation on their own. Although the House passed a bill in July that would require the EPA to set standards, companion legislation has yet to reach the Senate.

"This law adds momentum to the fight against nonessential uses of PFAS," David Andrews, a senior scientist at EWG, said in a statement. "California has joined the effort to protect Americans from the entire family of toxic forever chemicals."

As far as recycling is concerned, Newsom signed a law banning the use of misleading recycling labels, as well as legislation designed to raise consumer awareness and industry accountability. The recycling bills serve to complement a \$270 million portion of the state budget that will go toward modernizing recycling systems and promoting a circular economy, according to his office.

Other measures in the recycling package include provisions to discourage the export of plastic that becomes waste, more flexibility for operations at beverage container recycling centers and [...]

Monoculture Agriculture Leads to Poor Soil Health

NA, Beyond Pesticide

Although the authors did not delve into specifics over synthetic fertilizer and pesticide usage on the monoculture sites, prior studies that utilize the long-term cropping systems studied in the current paper indicated the regular use of 28% urea-ammonium nitrate fertilizer, glyphosate, glufosinate, and atrazine (perennial grasses were mowed regularly). All of these products have a strong propensity to harm soil health. A review on glyphosate published in 2017 found risks to soil that include the reduction of nutrient availability for plants and organisms, lower diversity, specifically, reductions of beneficial soil bacteria, increases in plant root pathogens, disturbed earthworm activity, reduced nitrogen fixing at plant roots, and compromised growth and reproduction in some soil and aquatic organisms. Synthetic fertilizers are particularly problematic, requiring high amounts of fossil fuels to produce, and releasing toxic carbon-trapping byproducts into air and waterways after application. Because synthetic fertilizers are in plant available form, whatever is not immediately taken up by a plant most simply runs off through the soil. Microbial populations are likewise harmed by these quick influxes of nutrients, resulting in damage to soil structure, soil diversity, and nutrient availability.

Poor soil health impacts the ecosystem services that a given area can provide. From decomposition of organic matter to carbon fixation and nutrient cycling, a healthy stock of soil microbes are critical. Research finds that the less diverse soil microbes are, the less functional a landscape will be.

"Agricultural management practices that reduce soil disturbance, reduce chemical inputs, and increase the amount of time the soil is covered by a living crop all contribute to improved soil biological health," said Dr. Phillips. "Improved soil biological health will lead to more profitable and sustainable farms."

When deciding how to manage land, whether for a farm, garden, natural land, or right-of-way, it is critical to think holistically about management practices. Working with and mimicking natural processes should be the focus, with product inputs used only to support sustainable cultural practices. Organic agriculture provides a successful framework for this approach, eschewing toxic synthetic products in favor of natural materials that are compatible with organic systems. Research finds that organic production provides multiple benefits to human society, including long-term ecological, public health, and socioeconomic advantages over conventional, chemical-dependent systems that are often monoculture focused and only work at industrial scales.

Facts About Paraquat, Gramoxone, and Parazone Parkinson's Disease Lawsuits

Joseph H. Saunders, Legal Examiner

https://pinellas.legalexaminer.com/legal/facts-about-paraquat-gramoxone-and-parazone-parkinsons-disease-lawsuits/

What is Paraquat?

Paraquat dichloride, commonly referred to as "paraquat," is one of the most widely used active ingredients in pesticides across the United States. Paraquat is banned in a number of countries around the world because it is so toxic that ingesting a single sip can be deadly. In the United States, paraquat products are Restricted Use Pesticides (RUPs) and may only be used by commercially certified applicators.

Despite the high toxicity level of paraquat, its use has risen over the last fifteen years. A number of sources, include the American Journal of Epidemiology, JAMA, and the National institute of Environmental Health Sciences, have shared research that points to a link between paraquat and Parkinson's disease. The Unified Parkinson's Advocacy Council has urged the Environmental Protection Agency (EPA) to ban the use of

paraquat in the United States, yet the EPA has not yet done so. Lawsuits against the leading manufacturers of paraquat products, Syngenta and Chevron U.S.A., Inc., have been filed to recover damages for Parkinson's disease resulting from paraquat use.

Paraguat is also sold under brand names Gramoxone and Parazone.

Is Paraquat safe?

The toxic effects of paraquat are widely known, which explains why only certified applicators may use paraquat. There is no antidote for paraquat ingestion, and even a small sip can be fatal. Breathing in paraquat is known to cause damage to internal organs such as the lungs, kidneys, liver, stomach, intestines, and esophagus.

Recent studies, however, have publicly warned of a link between paraquat usage and exposure and Parkinson's disease. Scientists believe that Parkinson's disease is caused by the death of neurons that produce dopamine in the brain, and studies have shown that paraquat can create oxidative stress in the brain that kills dopamine-producing neurons.

What are the risks associated with Paraquat?

The physical harms stemming from paraquat ingestion are widely known and appear on the warning labels of paraquat products. However, recent studies have identified paraquat as having a neurotoxic effect that substantially increases a user's risk of developing Parkinson's. One study concluded that the use of paraquat along with another pesticide increased a user's risk of developing Parkinson's by 600 percent.

Parkinson's disease is an incurable, progressive central nervous system disorder that can lead to tremors, loss of motor control, and dementia. Inhaling toxic fumes containing paraquat has a neurotoxic effect on the brain, destroying the dopamine-producing neurons in the brain (which, when destroyed, are widely believed to lead to Parkinson's). A number of studies have found that long-term exposure to paraquat substantially increases the risk of developing Parkinson's.

Were there any warnings about Paraquat?

Manufacturers of pesticide with paraquat did not include warnings about any neurological damage stemming from paraquat usage. This failure to warn, however, is problematic when evaluating the available scientific data at the time of production. Ongoing lawsuits have claimed that the oxidative stress qualities of paraquat, which damage dopamine-producing neurons in the brain, have been known since the 1960s.

A recent publication related to Parkinson's experiments details the use of paraquat and other pesticides in inducing Parkinson's in lab animals. The available scientific literature presents a strong causal connection between paraquat (and its neurotoxic effects) and Parkinson's disease, yet the manufacturers of pesticides using paraquat failed to warn about these effects. Instead, paraquat use and production has increased over time, exposing countless unaware users to a much higher risk of developing Parkinson's.

Existing Paraquat lawsuits

The first lawsuit against a manufacturer of pesticides with paraquat was filed in 2017. Since then dozens of lawsuits have been consolidated in the U.S. District Court for the Southern [...]

EPA Approval Of Pesticide Paraquat Now Under Attack

Jonathan D. Brightbill and Madalyn G. Brown, Mondaq

https://www.mondaq.com/unitedstates/environmental-law/1118690/epa-approval-of-pesticide-paraquat-now-under-attack

On September 23, 2021, several farmworker groups, green groups, and health organizations challenged EPA's reapproval of paraquat dichloride. Paraquat dichloride, known simply as paraquat, is a weed killer. It has been widely used in the United States since the 1960s. Petitioners seek to set aside EPA's interim registration review decision. They allege links to Parkinson's disease and other adverse health effects. Numerous lawsuits are already pending against manufactures of the widely used pesticide.

EPA's Review and Reapproval of Paraquat

The Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA") mandates that all pesticides distributed or sold in the United States be registered by EPA.1 An applicant seeking to register a pesticide must show that the pesticide will not cause unreasonable adverse effects to human health or to the environment when applied as directed on the label. Following initial approval for registration by EPA, a registered pesticide is to be reviewed by EPA every 15 years. This reevaluation is intended to ensure that the registered pesticides can still be safely used, according to the best available science.

Paraquat was first approved in 1964. It is classified a restricted-use pesticide ("RUP"). This means that only trained, certified applicators can use it. It is not accessible to the general public or for application in residential areas. Nevertheless, there have been deaths by accidental ingestion, often after the chemical was transferred to unlabeled food containers.2

Paraquat's registration review began in December 2011. As part of the review, EPA issued updated human health and ecological risk assessments. In October 2019, EPA released the draft assessments for public comment.3 Then in October 2020, EPA issued its proposed interim decision and addendum to the draft human health risk assessment.4 After review of public comments, in July 2021, EPA's interim registration decision approved the continued use of paraquat with certain new mitigation measures. These address potential human health risks identified.5 Examples include acreage limits for certain aerial applications of paraquat, required residential drift buffers, and prohibition of human flaggers.

Environmental Litigation Mounting

EPA did not find a "clear link between paraquat exposure from labeled uses and adverse health outcomes such as Parkinson's disease and cancer."6 Petitioners disagree. The petition for review filed in the United States Court of Appeals for the Ninth Circuit on September 23, 2021, seeks to set aside EPA's reapproval of paraquat because of its alleged health impacts on farmworkers and agricultural communities.7 Petitioners point to the 32 other countries that have already outlawed paraquat. They also cite studies connecting paraquat exposure to increased risk of Parkinson's.8

Meanwhile, manufacturers of paraquat are facing numerous personal injury lawsuits. These are related to paraquat's alleged latent health impacts—most notably, Parkinson's. The first lawsuits were filed in 2017. The case count continues to grow.9 In June, The Judicial Panel on Multidistrict Litigation created a new MDL for such claims in the Southern District of Illinois.10 More than 200 members' cases have been opened to date. As we have seen recently with other chemicals—including and glyphosate—regulatory actions and litigation regarding EPA and other health organization risk assessments may further private-party litigation.

+	+	+	+	+	+-	+-	+-	+-	+	+	+	+	+	+	+	+	+	-+	 	+-	+-	+-	+	+-	+	+	+	+	+	+	+	+	-+	-+	 - -	+-	+-	+-	+-	+-	+-	+	+	+	+	+	+	+-	+-	+-	-+	+	-+	+	+	+	+	+	+	+	+	+	+	+	+-	+-	+	+
+	-																																																																			

For more news, visit:

- Inside EPA: https://insideepa.com/
- Inside TSCA: https://insideepa.com/inside-tsca-home
- Bloomberg Environment and Energy: https://news.bloombergenvironment.com/environment-and-energy/

If you'd like to be removed or would like to add someone to the listserv please contact Bailey Rosen at Rosen. Bailey@epa.gov. Feedback and interesting articles are welcomed. Thanks and enjoy!

And while you're reading.... Remember to shoot your coworkers a shooting star!